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- (54) HEAT-INDUCIBLE PROMOTER
- (71) RHEIN BIOTECH GESELLSCHAFT FÜR NEUE BIOTECHNOLOGISCHE PROZESSE UND PRODUKTE MBH Eichsfelder Strasse 11, D-40595 Düsseldorf; (DE). [DE/DE]. (for all designated states except US)
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Abstract

The invention relates to nucleic acid molecules comprising a heat-inducible promoter and to expression vectors and host cells containing at least one inventive nucleic acid molecule. The invention further relates to kits and methods for producing one or more proteins using the inventive nucleic acid molecules and to various uses of the same. The aim of the invention is to provide an as selective as possible heat-inducible promoter, especially a promoter that is active in yeasts and that is suitable for the protein expression at high temperatures. To this end, the inventive nucleic acid molecule comprises a heat-inducible promoter and is selected from the following nucleic acids: (a) a nucleic acid the sequence of which comprises the promoter sequence of a gene of Hansenula polymorpha coding for a protein with trehalose-6-phosphate-synthase activity; (b) a nucleic acid with the sequence indicated in SEQ ID NO: 1; (c) a nucleic acid with a sequence that is at least 40 % identical with any of the sequences indicated in (a) or (b) over a stretch of 300 bp; (d) a nucleic acid that hybridizes to an antisense strand of any of the sequences indicated in (a), (b) or (c); (e) a derivative of any of the nucleic acid acids indicated in (a), (b) or (c) obtained by substitution, addition and/or deletion of one or more nucleotides; (f) a fragment of any of the nucleic acids indicated in (a) to (e) that maintains the function of the heat-inducible promoter; (g) a combination of several of the nucleic acids indicated in (a) to (f), with the sequences of the nucleic acids being the same or different; or a nucleic acid molecule with a sequence that is complementary to the sequence of any of the nucleic acids indicated in (a) to (g).







Presentation:

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